REPORT

NMTBA
The Association For Manufacturing Technology

Direct Dial: (703) 827-5260

STATISTICAL

No. 118-91 December 4, 1991

U.S. FOREIGN TRADE IN MANUFACTURING TECHNOLOGY – SEPTEMBER 1991

(Values in Millions of U.S. Dollars)

	Sept. 1991	Aug. 1991	Average Jun-Aug.	Year to Date '91	Year to Date '90	% Change YTD '90-'91
METAL CUTTING MACHINE TOOLS						
Exports	$ 43.7	$ 46.3	$ 51.5	$ 453.0	$ 453.9	(0.2%)
Imports	$129.7	$130.4	$131.0	$1,237.6	$1,364.3	(9.3%)
Balance	($ 86.0)	($ 84.1)	($ 79.5)	($ 784.6)	($ 910.4)	(13.8%)
METAL FORMING MACHINE TOOLS						
Exports	$ 34.0	$ 44.5	$ 44.0	$ 357.4	$ 344.2	3.8%
Imports	$ 29.2	$ 34.3	$ 33.6	$ 389.5	$ 377.7	3.1%
Balance	$ 4.8	$ 10.2	$ 10.4	($ 32.1)	($ 33.5)	(4.2%)
MACHINE TOOL TOTAL						
Exports	$ 77.6	$ 90.8	$ 95.6	$ 810.4	$ 798.1	1.5%
Imports	$158.9	$164.6	$164.6	$1,627.1	$1,741.9	(6.6%)
Balance	($ 81.3)	($ 73.8)	($ 69.0)	($ 816.7)	($ 943.8)	(13.5%)
NUMERICALLY CONTROLLED MACHINE TOOLS						
Exports	$ 26.2	$ 14.6	$ 20.5	$ 236.4	$ 259.3	(8.8%)
Imports	$ 94.5	$ 94.0	$ 96.5	$ 894.6	$ 931.3	(3.9%)
Balance	($ 68.3)	($ 79.4)	($ 76.0)	($ 658.2)	($ 672.0)	(2.1%)
OTHER MANUFACTURING TECHNOLOGY						
Exports	$136.5	$124.7	$138.2	$1,245.1	$1,357.3	(8.3%)
Imports	$146.0	$150.7	$161.2	$1,499.3	$1,465.5	2.3%
Balance	($ 9.5)	($ 26.0)	($ 23.0)	($ 254.2)	($ 108.2)	134.9%

Note: Numerically controlled machine tools is a subgroup of the machine tool total. ( ) denotes negative. NM = not meaningful. Individual items may not add up to totals due to rounding.

• U.S. machine tool exports in 1991 through September totalled $810.4 million, up 2% over last year. If this pace continues, 1991 will set an export record and mark the eighth consecutive year in which exports have risen.

• Machine tool imports so far in 1991 are $1.6 billion, down 7% from last year. Japan is the leading source at $734.9 million (down 9%), followed by Germany ($356.9 million, up 18%) and Taiwan ($85.8 million, down 17%).

• Year-to-date exports of NC machines are down 9% to $236.4 million; year-to-date imports of NC machines are down 4% to $894.6 million.

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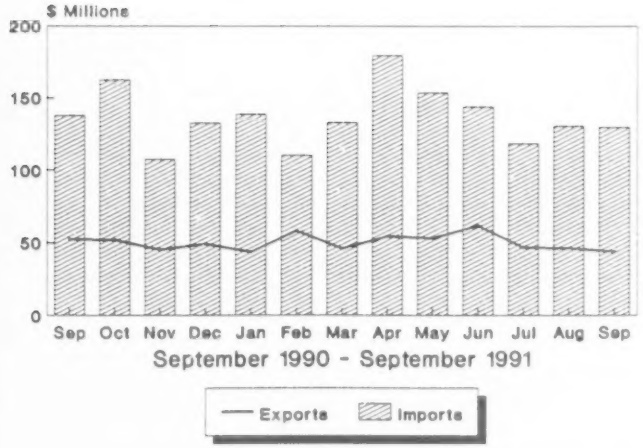
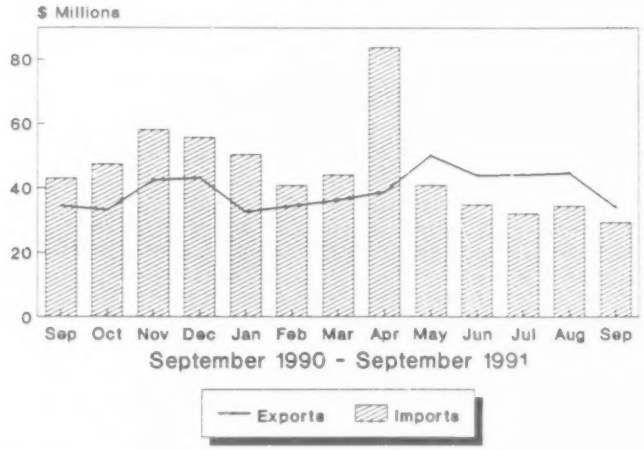
U.S. MONTHLY TRADE IN MACHINE TOOLS

METAL CUTTING



METAL FORMING



METAL CUTTING MACHINE TOOLS

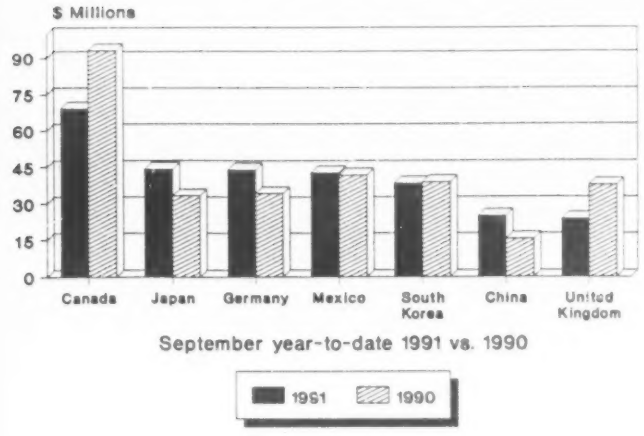
Exports

• Metal cutting machine tool exports in September fell to $43.7 million, the lowest monthly total since January of this year. Year-to-date exports are down less than 1% from last year at $453.0 million.

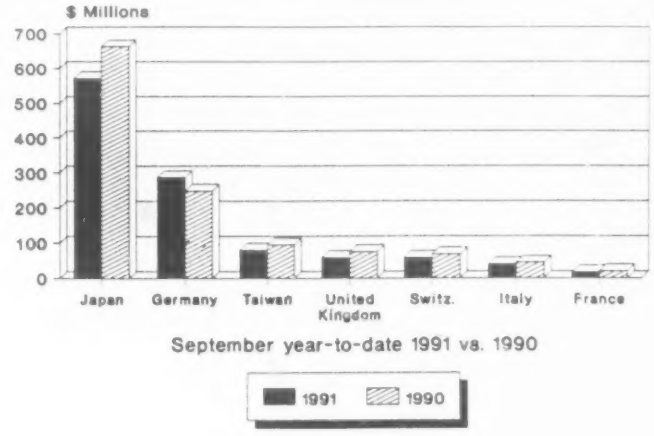
• Canada is the leading year-to-date export market at $69.2 million, including $10.4 million in September. Other top markets include Japan ($44.3 million), Germany ($43.9 million) and Mexico ($42.8 million).

• Used or rebuilt machines account for 13% of total metal cutting exports so far this year, up from 10% last year. Grinding machines account for 18% this year, down from 22% last year; lathes account for 9% in 1991, down from 13% in 1990.

LEADING U.S. EXPORT MARKETS
METAL CUTTING MACHINES



LEADING U.S. IMPORT SOURCES
METAL CUTTING MACHINES



Imports

• Metal cutting imports in September were $129.7 million, down slightly from August. Year-to-date imports of $1.2 billion are down 9% from last year.

• Japan remains the top import source in 1991 through September at $570.8 million, down 14% from last year, followed by Germany ($288.0 million, up 16%), Taiwan ($80.3 million, down 16%) and the United Kingdom ($58.4 million, down 22%).

• Machining centers account for 26% of total metal cutting imports so far in 1991, up from 23% last year; lathes account for 23% this year, down from 25% in 1990. Grinding machines accounted for 17% of imports last year, but 15% this year.

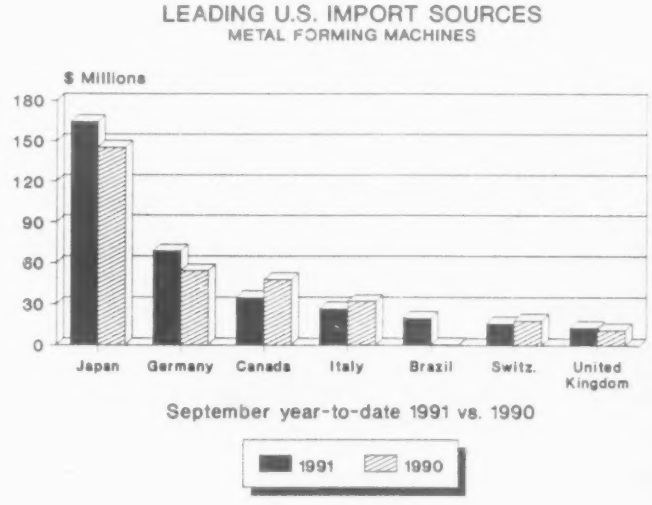
METAL FORMING MACHINE TOOLS

Exports

• Exports of metal forming machines fell 24% in September to $34.0 million, though exports still exceeded imports for the fifth consecutive month. Year-to-date exports are up 4% over last year at $357.4 million.

• Exports of presses this year are $65.7 million, down from $74.2 million last year. Exports of punching and shearing machines are $40.7 million, down from $48.7 million last year.

• Mexico is the top year-to-date metal forming export market at $44.5 million, up 7% from 1990. Other top markets include Canada ($34.4 million, down 34%), Germany ($33.5 million, up 68%) and Japan ($30.3 million, up 7%.)



Imports

• Imports of metal forming machines fell to $29.2 million in September, the lowest total since May 1988. Year-to-date imports are $389.5 million, up 3% from last year.

• Imports of presses in the first nine months of 1991 are $116.7 million, up from $81.7 million last year. Imports of punching and shearing machines are $43.1 million, down from $55.3 million last year.

• Japan is the top import source at $164.1 million, up 13% from last year, followed by Germany ($68.9 million, up 27%) and Canada ($34.7 million, down 28%).

OTHER MANUFACTURING TECHNOLOGY

Exports

• Year-to-date exports of machine tool parts and accessories are $499.6 million in September, down from $536.4 million in 1990. The top markets so far in 1991: Canada ($90.1 million), Germany ($52.8 million), Japan ($45.5 million), and the United Kingdom ($39.0 million).

• Year-to-date exports of numerical controls for controlling machine tools are $17.4 million, down from $23.4 million last year. Exports of injection molding machines are $56.6 million, up from $50.3 million last year.

Imports

• Imports of machine tool parts and accessories in 1991 through September are $422.4 million, up from $416.6 million last year. The major sources in 1991: Japan ($121.9 million), Germany ($94.3 million), Canada ($59.8 million) and the United Kingdom ($32.3 million).

• Year-to-date imports of injection molding machines are $231.0 million, down 3% from last year. Imports of extruders for thermoplastics, rubber or thermosetting materials are $50.1 million, down from $64.4 million last year at this time.

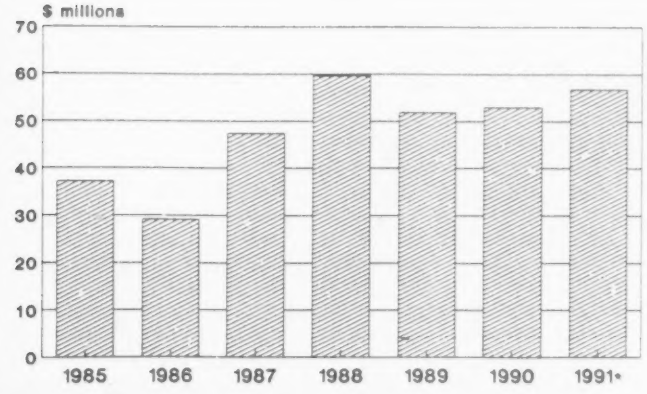
• Imports of industrial robots are $134.3 million, up 65% over last year at this time.

MONTHLY FOCUS

It is well-known that economic reform has engulfed the countries of the former East Bloc. Less well-known, even in the United States, are the economic reform programs underway in South America, which, as in Eastern Europe, often involve privatizations, tariff reductions and a much greater reliance on market forces.

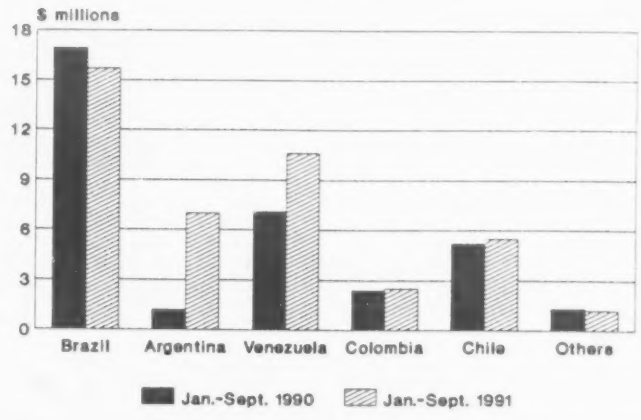
U.S. machine tool exports to the former East Bloc, excluding the USSR, are $3.4 million so far in 1991. Exports to the USSR are an additional $18.0 million. U.S. exports to South America in 1991 through September, though, are much higher -- $42.6 million, up 25% over last year at this time. Brazil is the largest year-to-date market in South America at $15.7 million, followed by Venezuela ($10.6 million), Argentina ($7.0 million) and Chile ($5.5 million).

U.S. Machine Tool Exports
to South America
1985-1991



• January-September annualized

U.S. Machine Tool Exports
to South America



1991 EXPORTS

METAL CUTTING

COUNTRY	SEPTEMBER	AUGUST	% CHANGE	SEPT'91 YTD	SEPT'90 YTD	% CHANGE
Canada	10,433,033	7,309,729	42.7%	69,226,015	93,079,267	-25.6%
Japan	2,600,348	4,063,110	-36.0%	44,251,060	33,258,212	33.1%
Germany	3,252,949	1,676,978	94.0%	43,858,026	34,212,588	28.2%
Mexico	4,873,991	4,275,460	14.0%	42,751,563	41,851,750	2.2%
South Korea	1,926,648	8,144,265	-76.3%	38,476,394	38,944,660	-1.2%
China	6,000,163	2,058,239	191.5%	24,921,473	15,552,797	60.2%
United Kingdom	2,671,788	3,618,118	-26.2%	23,692,702	37,621,853	-37.0%
USSR	0	302,247	-100.0%	17,926,246	6,404,994	179.9%
France	718,637	798,451	-10.0%	12,057,571	7,117,168	69.4%
India	242,559	1,413,907	-82.8%	10,760,547	16,596,556	-35.2%
Italy	1,243,510	971,615	28.0%	10,296,380	13,202,789	-22.0%
Brazil	1,392,671	305,278	356.2%	10,110,801	11,448,300	-11.7%
Taiwan	71,755	1,349,024	-94.7%	9,349,488	9,490,778	-1.5%
Belgium	1,198,389	1,741,556	-31.2%	9,349,290	17,187,015	-45.6%
Venezuela	398,748	923,881	-56.8%	8,541,510	5,699,235	49.9%
Singapore	128,329	1,443,241	-91.1%	6,728,034	7,459,882	-9.8%
Indonesia	90,846	151,679	-40.1%	4,698,416	172,977	2,616.2%
Switzerland	44,762	334,347	-86.6%	4,258,624	4,577,091	-7.0%
Netherlands	307,696	397,599	-22.6%	4,099,899	4,240,016	-3.3%
Australia	161,336	239,628	-32.7%	3,378,280	13,990,972	-75.9%
Malaysia	22,999	407,818	-94.4%	2,915,820	2,273,340	28.3%
Thailand	371,521	38,617	962.1%	2,105,781	1,657,647	27.0%
Spain	26,468	60,904	-56.5%	1,260,590	5,203,492	-75.8%
Austria	70,894	32,320	119.4%	757,502	226,757	234.1%

METAL FORMING

COUNTRY	SEPTEMBER	AUGUST	% CHANGE	SEPT'91 YTD	SEPT'90 YTD	% CHANGE
Mexico	4,193,644	4,869,400	-13.9%	44,491,086	41,401,043	7.5%
Canada	3,998,542	1,847,408	116.4%	34,439,707	52,439,014	-34.3%
Germany	2,829,301	3,347,303	-15.5%	33,503,871	19,984,311	67.7%
Japan	2,358,551	4,221,329	-44.1%	30,279,067	28,403,657	6.6%
United Kingdom	2,032,492	6,750,405	-69.9%	26,214,609	29,693,360	-11.7%
South Korea	4,573,623	2,001,890	128.5%	23,416,255	27,758,848	-15.6%
China	1,711,315	932,168	83.6%	20,950,705	12,314,542	70.1%
France	1,782,264	1,794,256	-0.7%	20,234,531	12,534,098	61.4%
Italy	134,250	3,428,352	-96.1%	9,627,118	7,276,085	32.3%
Australia	338,411	6,137,935	-94.5%	9,169,824	4,713,616	94.5%
Netherlands	533,838	504,943	5.7%	8,771,884	6,771,658	29.5%
Taiwan	1,495,036	878,610	70.2%	7,639,232	11,493,773	-33.5%
Thailand	197,190	826,111	-76.1%	7,376,215	3,689,932	99.9%
Brazil	810,795	755,907	7.3%	5,635,635	5,496,371	2.5%
Singapore	1,188,058	200,557	492.4%	5,608,650	4,837,993	15.9%
Spain	238,888	466,569	-48.8%	4,341,828	5,162,828	-15.9%
Indonesia	288,184	278,806	3.4%	4,023,489	5,636,467	-28.6%
Belgium	806,443	206,906	289.8%	2,897,993	2,538,998	14.1%
Switzerland	705,763	79,894	783.4%	2,220,835	1,888,536	17.6%
Venezuela	444,713	45,616	874.9%	2,018,293	1,418,364	42.3%
Malaysia	50,108	315,996	-84.1%	1,226,228	4,344,033	-71.8%
India	49,826	52,586	-5.2%	922,002	5,892,777	-84.4%
Austria	54,479	0	NA	378,768	2,164,022	-82.5%
USSR	0	0	NA	122,884	694,819	-82.3%

MACHINE TOOL TOTAL

COUNTRY	SEPTEMBER	AUGUST	% CHANGE	SEPT'91 YTD	SEPT'90 YTD	% CHANGE
Canada	14,431,575	9,157,137	57.6%	103,665,722	145,518,281	-28.8%
Mexico	9,067,635	9,144,860	-0.8%	87,242,649	83,252,793	4.8%
Germany	6,082,250	5,024,281	21.1%	77,361,897	54,196,899	42.7%
Japan	4,958,899	8,284,439	-40.1%	74,530,127	61,661,869	20.9%
South Korea	6,500,271	10,146,155	-35.9%	61,892,649	66,703,508	-7.2%
United Kingdom	4,704,280	10,368,523	-54.6%	49,907,311	67,315,213	-25.9%
China	7,711,478	2,990,407	157.9%	45,872,178	27,867,339	64.6%
France	2,500,901	2,592,707	-3.5%	32,292,102	19,651,266	64.3%
Italy	1,377,760	4,399,967	-68.7%	19,923,498	20,478,874	-2.7%
USSR	0	302,247	-100.0%	18,049,130	7,099,813	154.2%
Taiwan	1,566,791	2,227,634	-29.7%	16,988,720	20,984,551	-19.0%
Brazil	2,203,466	1,061,185	107.6%	15,746,436	16,944,671	-7.1%
Netherlands	841,534	902,542	-6.8%	12,871,783	11,011,674	16.9%
Australia	499,747	6,377,563	-92.2%	12,548,104	18,704,588	-32.9%
Singapore	1,316,387	1,643,798	-19.9%	12,336,684	12,297,875	0.3%
Belgium	2,004,832	1,948,462	2.9%	12,247,283	19,726,013	-37.9%
India	292,385	1,466,493	-80.1%	11,682,549	22,489,333	-48.1%
Venezuela	843,461	969,497	-13.0%	10,559,803	7,117,599	48.4%
Thailand	568,711	864,728	-34.2%	9,481,996	5,347,579	77.3%
Indonesia	379,030	430,485	-12.0%	8,721,905	5,809,444	50.1%
Switzerland	750,525	414,241	81.2%	6,479,459	6,465,627	0.2%
Spain	265,356	527,473	-49.7%	5,602,418	10,366,320	-46.0%
Malaysia	73,107	723,814	-89.9%	4,142,048	6,617,373	-37.4%
Austria	125,373	32,320	287.9%	1,136,270	2,390,779	-52.5%

1991 IMPORTS

METAL CUTTING

COUNTRY	SEPTEMBER	AUGUST	% CHANGE	SEPT'91 YTD	SEPT'90 YTD	% CHANGE
Japan	$75,182,939	$72,903,362	3.1%	$570,799,398	$662,223,182	-13.8%
Germany	19,191,544	19,345,911	-0.8%	287,979,898	248,892,189	15.7%
Taiwan	6,870,022	6,279,361	9.4%	80,310,874	95,487,750	-15.9%
United Kingdom	3,990,795	4,339,499	-8.0%	58,397,148	74,950,250	-22.1%
Switzerland	4,212,049	6,019,912	-30.0%	58,264,852	68,638,975	-15.1%
Italy	6,836,990	7,354,873	-7.0%	40,512,864	44,123,559	-8.2%
France	886,945	3,127,751	-71.6%	16,071,140	20,416,106	-21.3%
Spain	232,454	1,778,576	-86.9%	14,165,297	20,694,519	-31.6%
South Korea	1,259,690	1,735,234	-27.4%	14,150,644	14,800,942	-4.4%
Canada	1,615,730	641,759	151.8%	13,710,744	16,528,039	-17.0%
Sweden	552,318	83,831	558.8%	13,593,024	12,164,462	11.7%
Singapore	1,462,951	1,011,615	44.6%	9,095,720	14,837,621	-38.7%
Brazil	781,543	831,574	-6.0%	7,028,924	10,082,334	-30.3%
Belgium	0	0	NA	1,684,557	1,625,914	3.6%

METAL FORMING

COUNTRY	SEPTEMBER	AUGUST	% CHANGE	SEPT'91 YTD	SEPT'90 YTD	% CHANGE
Japan	$11,095,843	$9,610,513	15.5%	$164,056,081	$145,319,640	12.9%
Germany	4,785,020	9,684,056	-50.6%	68,902,153	54,286,831	26.9%
Canada	4,091,674	3,350,481	22.1%	34,743,002	48,034,743	-27.7%
Italy	3,476,401	1,564,964	122.1%	26,587,578	31,940,783	-16.8%
Brazil	19,000	0	NA	19,759,871	202,406	9,662.5%
Switzerland	1,367,644	2,075,389	-34.1%	15,911,031	18,152,010	-12.3%
United Kingdom	417,608	987,774	-57.7%	12,858,436	11,165,630	15.2%
Sweden	414,939	264,477	56.9%	8,520,236	23,391,335	-63.6%
Belgium	536,475	1,781,756	-69.9%	7,618,206	17,872,135	-57.4%
Taiwan	500,619	783,175	-36.1%	5,453,507	7,835,595	-30.4%
Spain	41,676	543,643	-92.3%	2,646,721	3,270,910	-19.1%
France	757,313	90,797	734.1%	2,102,499	3,107,090	-32.3%
South Korea	6,840	3,420	100.0%	522,495	515,738	1.3%
Singapore	0	0	NA	300,254	132,580	126.5%

MACHINE TOOL TOTAL

COUNTRY	SEPTEMBER	AUGUST	% CHANGE	SEPT'91 YTD	SEPT'90 YTD	% CHANGE
Japan	$86,278,782	$82,513,875	4.6%	$734,855,479	$807,542,822	-9.0%
Germany	23,976,564	29,029,967	-17.4%	356,882,051	303,179,020	17.7%
Taiwan	7,370,641	7,062,536	4.4%	85,764,381	103,323,345	-17.0%
Switzerland	5,579,693	8,095,301	-31.1%	74,175,883	86,790,985	-14.5%
United Kingdom	4,408,403	5,327,273	-17.2%	71,255,584	86,115,880	-17.3%
Italy	10,313,391	8,919,837	15.6%	67,100,442	76,064,342	-11.8%
Canada	5,707,404	3,992,240	43.0%	48,453,746	64,562,782	-25.0%
Brazil	800,543	831,574	-3.7%	26,788,795	10,284,740	160.5%
Sweden	967,257	348,308	177.7%	22,113,260	35,555,797	-37.8%
France	1,644,258	3,218,548	-48.9%	18,173,639	23,523,196	-22.7%
Spain	274,130	2,322,219	-88.2%	16,812,018	23,965,420	-29.8%
South Korea	1,266,530	1,738,654	-27.2%	14,673,139	15,316,680	-4.2%
Singapore	1,462,951	1,011,615	44.6%	9,395,974	14,970,201	-37.2%
Belgium	536,475	1,781,756	-69.9%	9,302,763	19,498,049	-52.3%

1991 U.S. EXPORTS BY PRODUCT GROUPS

PRODUCT TYPES	JANUARY 1991		FEBRUARY 1991		MARCH 1991		APRIL 1991	
	Units	Value	Units	Value	Units	Value	Units	Value
Used & rebuilt & under $3,025	5,350	$13,231,937	5,314	$9,384,660	5,918	$12,359,757	5,272	$15,333,596
Boring machines	8	572,189	8	2,689,884	7	490,980	10	781,577
Drilling machines	104	2,125,292	72	2,302,444	98	2,731,002	94	1,177,353
Gear cutting machines	14	7,378,919	23	3,441,470	16	3,898,627	22	6,720,535
Grinding machines	244	5,937,543	272	10,254,977	275	8,387,839	313	11,543,197
NC horizontal lathes	15	2,388,500	33	3,043,968	29	3,419,112	38	4,707,962
NC vertical lathes	1	161,310	2	341,835	6	371,174	1	89,700
Non-NC lathes	37	817,093	46	1,273,108	34	912,266	64	1,399,820
Milling machines	21	1,285,651	27	1,256,940	56	1,629,636	35	6,730,275
Machining centers	18	2,251,834	27	4,699,366	21	6,179,301	33	5,723,799
Station type machines	7	6,763,963	10	16,280,662	3	3,750,445	0	0
Other metal cutting machines	223	7,078,662	278	7,046,503	322	7,317,458	266	6,517,985
Punching & shearing machines	108	4,513,331	79	5,456,279	85	4,584,562	157	4,594,728
Bending & forming machines	116	4,251,882	102	6,952,107	119	7,232,573	120	4,830,552
Presses	293	7,418,063	96	5,734,227	128	4,847,879	168	7,262,958
Forging machines	11	2,746,151	19	5,146,204	21	4,124,370	11	868,133
Other metal forming machines	231	7,030,224	185	7,182,512	193	9,543,993	308	14,549,088
MACHINE TOOL TOTAL	6,801	75,952,544	6,593	92,487,146	7,331	81,780,974	6,912	92,831,258

PRODUCT TYPES	MAY 1991		JUNE 1991		JULY 1991		AUGUST 1991	
	Units	Value	Units	Value	Units	Value	Units	Value
Used & rebuilt & under $3,025	5,847	$14,473,978	6,716	$15,068,308	5,909	$16,595,564	7,211	$21,518,830
Boring machines	9	811,684	29	2,458,144	53	1,485,134	21	1,762,000
Drilling machines	81	1,767,423	182	2,096,676	182	2,218,922	78	1,759,560
Gear cutting machines	39	6,598,232	42	10,858,258	11	4,027,477	7	2,476,528
Grinding machines	285	9,241,644	390	12,599,243	398	11,576,263	308	6,788,528
NC horizontal lathes	19	1,914,295	25	2,373,736	26	2,567,207	23	2,111,735
NC vertical lathes	9	592,211	2	108,000	4	269,504	1	22,000
Non-NC lathes	45	1,357,057	49	2,263,152	27	407,865	35	1,881,608
Milling machines	57	5,134,958	73	6,889,800	57	3,124,857	48	2,636,055
Machining centers	37	5,715,931	24	2,660,799	26	3,139,607	12	948,374
Station type machines	4	3,143,769	6	2,649,559	5	4,718,427	2	80,000
Other metal cutting machines	341	8,257,118	273	9,131,128	198	4,100,231	281	9,631,000
Punching & shearing machines	111	5,445,644	129	3,810,698	132	3,568,471	115	4,809,018
Bending & forming machines	108	5,331,914	257	9,068,216	169	6,262,244	176	6,665,618
Presses	96	6,098,800	210	6,552,960	199	11,252,200	126	7,336,120
Forging machines	40	4,435,634	40	5,388,723	57	8,447,700	38	9,086,436
Other metal forming machines	223	22,718,552	234	11,390,564	225	6,748,375	194	11,311,721
MACHINE TOOL TOTAL	7,351	103,038,844	8,681	105,367,964	7,678	90,510,048	8,676	90,825,131

1991 U.S. EXPORTS BY PRODUCT GROUPS

PRODUCT TYPES	SEPTEMBER 1991 Units	SEPTEMBER 1991 Value	SEPT. 1991 YTD Units	SEPT. 1991 YTD Value	SEPTEMBER 1990 Units	SEPTEMBER 1990 Value	SEPT. 1990 YTD Units	SEPT. 1990 YTD Value
Used & rebuilt & under $3,025	4,681	$13,799,781	52,218	$131,766,411	5,218	$13,541,688	45,301	$122,593,523
Boring machines	3	82,808	148	11,134,400	13	892,848	130	14,370,322
Drilling machines	72	1,649,843	963	17,828,515	72	2,247,262	811	14,910,443
Gear cutting machines	49	6,635,184	223	52,035,230	16	8,205,773	175	43,900,659
Grinding machines	233	5,137,364	2,718	81,466,598	412	8,753,533	2,890	98,104,939
NC horizontal lathes	22	2,547,345	230	25,073,860	29	3,059,742	329	35,262,360
NC vertical lathes	1	31,150	27	1,986,884	5	2,322,630	53	10,143,448
Non-NC lathes	49	1,621,326	386	11,933,295	51	1,033,985	570	12,943,818
Milling machines	16	363,774	390	29,051,946	38	5,262,002	334	29,841,729
Machining centers	37	9,299,241	235	40,618,252	13	2,443,148	290	44,603,969
Station type machines	15	1,103,920	52	38,490,745	5	5,650,047	56	26,716,946
Other metal cutting machines	215	6,841,529	2,397	65,921,614	288	5,325,005	2,908	57,722,578
Punching & shearing machines	117	3,929,919	1,033	40,712,650	56	3,258,296	1,112	48,739,774
Bending & forming machines	122	4,852,226	1,289	55,447,332	165	8,316,381	1,404	52,564,457
Presses	169	9,193,318	1,485	65,696,525	126	5,543,751	1,698	74,192,075
Forging machines	52	3,892,191	289	44,135,542	12	2,088,733	287	36,972,225
Other metal forming machines	171	6,665,077	1,964	97,140,106	168	8,580,087	2,339	74,512,010
MACHINE TOOL TOTAL	6,024	77,645,996	66,047	810,439,905	6,687	86,524,911	60,687	798,095,275

PRODUCT TYPES	% CHANGE AUG'91–SEPT'91 Units	% CHANGE AUG'91–SEPT'91 Value	% CHANGE SEPT'90–SEPT'91 Units	% CHANGE SEPT'90–SEPT'91 Value	% CHANGE YTD'90–YTD'91 Units	% CHANGE YTD'90–YTD'91 Value
Used & rebuilt & under $3,025	-35.1%	-35.9%	-10.3%	1.9%	15.3%	7.5%
Boring machines	-85.7%	-95.3%	-76.9%	-90.7%	13.8%	-22.5%
Drilling machines	-7.7%	-6.2%	0.0%	-26.6%	18.7%	19.6%
Gear cutting machines	600.0%	167.9%	206.3%	-19.1%	27.4%	18.5%
Grinding machines	-24.4%	-24.3%	-43.4%	-41.3%	-6.0%	-17.0%
NC horizontal lathes	-4.3%	20.6%	-24.1%	-16.7%	-30.1%	-28.9%
NC vertical lathes	0.0%	41.6%	-80.0%	-98.7%	-49.1%	-80.4%
Non-NC lathes	40.0%	-13.8%	-3.9%	56.8%	-32.3%	-7.8%
Milling machines	-66.7%	-86.2%	-57.9%	-93.1%	16.8%	-2.6%
Machining centers	208.3%	880.5%	184.6%	280.6%	-19.0%	-8.9%
Station type machines	650.0%	1,279.9%	200.0%	-80.5%	-7.1%	44.1%
Other metal cutting machines	-23.5%	-29.0%	-25.3%	28.5%	-17.6%	14.2%
Punching & shearing machines	1.7%	-18.3%	108.9%	20.6%	-7.1%	-16.5%
Bending & forming machines	-30.7%	-27.2%	-26.1%	-41.7%	-8.2%	5.5%
Presses	34.1%	25.3%	34.1%	65.8%	-12.5%	-11.5%
Forging machines	36.8%	-57.2%	333.3%	86.3%	0.7%	19.4%
Other metal forming machines	-11.9%	-41.1%	1.8%	-22.3%	-16.0%	30.4%
MACHINE TOOL TOTAL	-30.6%	-14.5%	-9.9%	-10.3%	8.8%	1.5%

1991 U.S. IMPORTS BY PRODUCT GROUPS

PRODUCT TYPES	JANUARY 1991		FEBRUARY 1991		MARCH 1991		APRIL 1991	
	Units	Value	Units	Value	Units	Value	Units	Value
Used & rebuilt & under $3,025	71,667	$13,094,991	94,612	$15,968,463	63,827	$14,630,134	91,842	$16,332,717
Boring machines	75	3,212,626	65	3,295,233	55	6,672,018	47	5,623,400
Drilling machines	136	5,284,960	72	2,124,951	105	5,761,640	107	2,964,231
Gear cutting machines	34	7,247,022	30	2,608,872	12	3,256,264	23	6,619,154
Grinding machines	662	23,141,603	464	17,045,322	540	20,820,588	509	26,824,722
NC horizontal lathes	158	17,509,455	251	25,854,656	244	28,306,454	280	25,531,297
NC vertical lathes	9	1,367,349	15	2,253,656	9	2,973,011	15	3,573,928
Non-NC lathes	722	8,815,703	340	4,755,176	312	7,055,881	317	4,534,633
Milling machines	449	12,771,541	257	2,795,380	250	4,970,541	320	9,449,803
Machining centers	293	33,595,255	212	22,089,069	167	23,849,656	189	59,165,452
Station type machines	14	4,189,738	4	1,830,253	5	1,401,630	19	4,376,300
Other metal cutting machines	448	11,368,644	217	12,635,073	254	16,773,980	329	18,589,257
Punching & shearing machines	67	5,697,766	59	1,638,364	89	5,334,266	100	4,429,933
Bending & forming machines	189	6,557,096	183	8,695,550	147	8,228,937	122	3,949,688
Presses	72	16,236,188	317	9,033,944	163	8,995,976	85	51,444,817
Forging machines	59	5,028,586	47	2,528,010	51	5,954,214	44	6,285,995
Other metal forming machines	286	13,786,011	230	15,783,509	277	12,006,374	243	13,702,533
MACHINE TOOL TOTAL	75,340	188,904,534	97,375	150,935,481	66,507	176,991,564	94,601	263,397,860

PRODUCT TYPES	MAY 1991		JUNE 1991		JULY 1991		AUGUST 1991	
	Units	Value	Units	Value	Units	Value	Units	Value
Used & rebuilt & under $3,025	61,461	$13,487,177	60,137	$11,892,444	55,148	$13,352,862	74,318	$11,870,677
Boring machines	53	7,001,111	55	3,314,472	51	3,685,439	45	1,801,332
Drilling machines	79	6,287,879	146	3,825,684	73	2,839,334	86	2,335,487
Gear cutting machines	91	4,865,147	57	3,552,435	32	3,543,870	19	3,725,410
Grinding machines	515	14,511,571	382	13,752,180	468	18,779,695	386	21,596,437
NC horizontal lathes	197	20,692,781	196	20,231,721	199	18,351,920	227	23,514,958
NC vertical lathes	2	1,159,139	6	908,254	10	2,266,809	13	3,920,266
Non-NC lathes	442	10,258,079	402	8,630,438	555	6,940,660	308	4,206,757
Milling machines	226	5,441,990	328	6,999,359	374	6,736,063	292	4,643,995
Machining centers	199	40,498,256	231	62,377,569	249	23,528,172	204	28,546,978
Station type machines	16	13,375,688	8	1,595,456	8	8,078,447	16	13,974,758
Other metal cutting machines	252	18,837,312	314	9,426,321	298	12,496,402	289	12,912,572
Punching & shearing machines	109	4,442,498	74	5,337,144	106	5,805,391	84	4,603,173
Bending & forming machines	124	7,388,462	129	5,919,854	156	7,413,619	131	4,386,000
Presses	301	9,718,955	131	5,872,448	102	5,129,418	307	6,092,772
Forging machines	152	6,220,779	69	5,986,386	35	1,841,002	87	6,995,815
Other metal forming machines	172	10,036,703	180	9,024,713	194	9,644,967	131	9,510,828
MACHINE TOOL TOTAL	64,391	194,223,527	62,845	178,646,878	58,058	150,434,070	76,943	164,638,215

1991 U.S. IMPORTS BY PRODUCT GROUPS

PRODUCT TYPES	SEPTEMBER 1991 Units	SEPTEMBER 1991 Value	SEPT. 1991 YTD Units	SEPT. 1991 YTD Value	SEPTEMBER 1990 Units	SEPTEMBER 1990 Value	SEPT. 1990 YTD Units	SEPT. 1990 YTD Value
Used & rebuilt & under $3,025	68,503	$12,925,407	641,515	$123,554,872	78,484	$11,149,478	686,157	$113,502,989
Boring machines	64	4,555,634	510	39,161,265	52	3,494,230	461	31,399,966
Drilling machines	61	2,902,483	865	34,326,649	49	2,266,373	1,111	34,565,502
Gear cutting machines	11	1,036,962	309	36,455,136	69	4,625,890	409	37,226,404
Grinding machines	413	25,438,841	4,339	181,910,959	616	25,521,740	6,542	226,741,798
NC horizontal lathes	141	15,597,511	1,893	195,590,753	194	20,111,149	2,465	239,587,411
NC vertical lathes	11	3,650,775	90	22,073,187	4	689,943	141	19,582,703
Non-NC lathes	299	5,939,533	3,697	61,136,860	500	7,286,875	6,110	88,364,341
Milling machines	196	2,605,184	2,702	56,413,856	363	7,383,527	4,155	65,479,331
Machining centers	261	32,637,026	2,005	326,287,433	147	27,592,987	2,383	316,384,692
Station type machines	12	2,689,422	102	61,511,692	14	14,932,439	138	67,042,977
Other metal cutting machines	257	11,639,564	2,658	124,679,125	233	14,697,321	3,724	143,597,527
Punching & shearing machines	75	5,842,087	763	43,130,622	103	4,806,367	1,318	55,272,524
Bending & forming machines	121	6,484,435	1,302	59,023,641	161	5,831,579	1,727	69,321,030
Presses	601	4,173,370	2,079	116,697,888	416	10,399,978	3,028	81,698,564
Forging machines	19	5,358,263	563	46,199,050	144	8,927,234	783	50,125,743
Other metal forming machines	123	5,429,895	1,836	98,925,533	204	10,822,213	2,061	102,049,008
MACHINE TOOL TOTAL	71,168	158,906,392	667,228	1,627,078,521	81,753	180,539,323	722,713	1,741,942,510

PRODUCT TYPES	% CHANGE AUG'91-SEPT'91 Units	% CHANGE AUG'91-SEPT'91 Value	% CHANGE SEPT'90-SEPT'91 Units	% CHANGE SEPT'90-SEPT'91 Value	% CHANGE YTD'90-YTD'91 Units	% CHANGE YTD'90-YTD'91 Value
Used & rebuilt & under $3,025	-7.8%	8.9%	-12.7%	15.9%	-6.5%	8.9%
Boring machines	42.2%	152.9%	23.1%	30.4%	10.6%	24.7%
Drilling machines	-29.1%	24.3%	24.5%	28.1%	-22.1%	-0.7%
Gear cutting machines	-42.1%	-72.2%	-84.1%	-77.6%	-24.4%	-2.1%
Grinding machines	7.0%	17.8%	-33.0%	-0.3%	-33.7%	-19.8%
NC horizontal lathes	-37.9%	-33.7%	-27.3%	-22.4%	-23.2%	-18.4%
NC vertical lathes	-15.4%	-6.9%	175.0%	429.1%	-36.2%	12.7%
Non-NC lathes	-2.9%	41.2%	-40.2%	-18.5%	-39.5%	-30.8%
Milling machines	-32.9%	-43.9%	-46.0%	-64.7%	-35.0%	-13.8%
Machining centers	27.9%	14.3%	77.6%	18.3%	-15.9%	3.1%
Station type machines	-25.0%	-9.2%	-14.3%	-15.0%	-26.1%	-8.3%
Other metal cutting machines	-11.1%	-9.9%	10.3%	-20.8%	-28.6%	-13.2%
Punching & shearing machines	-10.7%	26.9%	-27.2%	21.5%	-42.1%	-22.0%
Bending & forming machines	-7.6%	47.8%	-24.8%	11.2%	-24.6%	-14.9%
Presses	95.8%	-31.5%	44.5%	-59.9%	-31.3%	42.8%
Forging machines	-78.2%	-23.4%	-86.8%	-40.0%	-28.1%	-7.8%
Other metal forming machines	-6.1%	-42.9%	-39.7%	-49.8%	-10.9%	-3.1%
MACHINE TOOL TOTAL	-7.5%	-3.5%	-12.9%	-12.0%	-7.7%	-6.6%